

## ABSTRACT OF THE DISCLOSURE

To provide a stem type package with good high frequency characteristics for high-speed transmission of 10Gbps or more, the package includes a stem which has an under surface, an upper surface and one or more through holes penetrating from the upper surface to the under surface, a mount to be mounted with an optical semiconductor device on the upper surface, a lead terminal for signal supply penetrating one of the through holes with an insulator between them, the upper surface having an earth conductor adjacent to the lead terminal for signal supply projected from the upper surface so that a difference between the characteristic impedance of the transmission line constituted with the through hole, the insulator and the lead terminal for signal supply and the characteristic impedance of the transmission line constituted with a lead terminal for signal supply projected from the upper surface becomes small.